

REMARKS

The Office Action mailed August 24, 2005, has been received and reviewed. Claims 1 through 3, 5 through 33, 35, 36, 38 through 42, 52 and 53 are currently pending in the application. Claims 1 through 3, 5 through 33, 35, 36, 38 through 42, 52 and 53 stand rejected. Applicants have amended claims 1, 10-15, 23, 35, 36 and 52, and respectfully request reconsideration of the application as amended herein.

No new matter has been added, and the amendments to claims 10-14 are solely to enhance antecedent basis. The amendments to independent claims 1, 15, 23, 35, 36 and 52 further distinguish the present invention over the reference as applied by the Examiner.

Supplemental Information Disclosure Statement

Please note that Supplemental Information Disclosure Statements were filed herein on February 14, 2005 and June 27, 2005, and that no copies of the PTO-1449s were returned with the outstanding Office Action. Applicants respectfully request that the information cited on the PTO-1449s be made of record herein. It is respectfully requested that an initialed copy of the PTO-1449s evidencing consideration of the cited references be returned to the undersigned attorney.

Copies of the Supplemental Information Disclosure Statements and accompanying PTO-1449 forms or equivalent and of the date-stamped postcards evidencing receipt of these papers are provided herewith for the convenience of the Examiner.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 5,394,303 to Yamaji

Claims 1 through 3, 5 through 33, 35, 36, 38 through 42, 52 and 53 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Yamaji (U.S. Patent No. 5,394,303). Applicants respectfully traverse this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the

art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

The 35 U.S.C. § 103(a) obviousness rejections of claims 1, 10-15, 23, 35, 36 and 52 are improper because the reference applied fails to teach or suggest all of the claim limitations of the claims as amended herein.

With respect to claim 1, the reference teaches flexible substrates which (as in FIG. 3A) have a first section including contacts which mate with bond pads of a semiconductor die and associated with conductive traces, some of which extend to contacts on each of two separate, second and third sections of the flexible substrate. However, all of the traces do not extend from the first section contacts to one of the second and third sections. The second and third sections each extend over a portion of a back side of the semiconductor die to which the contacts of the first section are connected, but neither extends over substantially all of the back side. Other flexible substrates (as in FIG. 8) have first sections which connect to only part of the bond pads on an active surface of a semiconductor die. Accordingly, all of the claim limitations are not taught or suggested.

With respect to claim 15, the same observations pertain as do to claim 1. Further, claim 15 requires first and second semiconductor dice with substantially all bond pads respectively connected to contacts on opposing sides of a first portion of an interposer substrate, which structure is not taught or suggested by the reference.

The same observations apply to claim 35 as to claim 1. Substantially all of the first portion of the interposer substrate is disposed between the first and second dice, substantially all of the second portion is disposed over the back side of one of the first and second dice, and substantially all of the conductive traces are connected to the first and second dice on opposing sides of the first portion.

The same observations apply to claim 36 as to claim 35, the subject matter being recited in a different manner and with respect to an interposer substrate specifically configured to be

assembled and electrically connected with two semiconductor dice. However, the sizing of the first and second portions of the interposer substrate and the nature of the electrical connections remain untaught and unsuggested by the reference.

The observations applicable to claims 35 and 36 also apply to claim 52, which adds a connection to a higher level packaging structure.

Claims 2, 5, 5-14, 16-33, 38-42 and 53 are allowable as depending from allowable independent claims.

Claim 23 is further allowable as the reference fails to teach or suggest the structure recited therein as the claim is presently amended. Applicants sincerely apologize for the linguistic error previously resident in the claim with respect to the manner in which the claimed structure was recited.

ENTRY OF AMENDMENTS

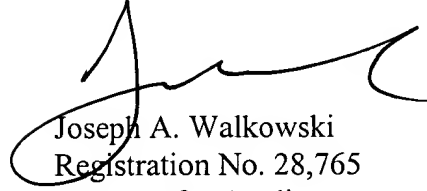
The amendments to claims 1, 10-15, 23, 35, 36 and 52 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. Further, the amendments do not raise new issues or require a further search.

CONCLUSION

Claims 1 through 3, 5 through 33, 35, 36, 38 through 42, 52 and 53 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicants' undersigned attorney.

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Respectfully submitted,

A handwritten signature in black ink, appearing to be 'J. Walkowski', with a large loop at the end.

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